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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,746	02/08/2001	Nicolas Voyer	202722US2	6586

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EXAMINER	
LELE, TANMAY S	

ART UNIT	PAPER NUMBER
2684	11

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/778,746	VOYER, NICOLAS	
	Examiner	Art Unit	
	Tanmay S Lele	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15,16,18-24 and 26-30* is/are rejected.

7)☒ Claim(s) *17,25 and 31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Allowable Subject Matter

1. Claim 17, 25, and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 17, 25, and 31, the present invention is of wherein the value of each of the base attenuation coefficients is less than one, the value of the attenuation coefficient of each of the plurality of attenuation units being closer to one for sub-composite signals having high priority level. The closest prior art, Rohani et al (Rohani, US Patent No. 6,064,659) in view of Dahlman et al. (Dahlman, US Patent No. 6,173,162) in further view of Chen (Chen, US Patent US 5,893,035), teach of maintaining enough power to keep the call active (Rohani: starting column 4,line 58 and ending column 5, line 4) but alone, or in combination with other art, not specifically of wherein the value of each of the base attenuation coefficients is less than one, the value of the attenuation coefficient of each of the plurality of attenuation units being closer to one for sub-composite signals having high priority level.

Response to Arguments

2. Applicant's arguments with respect to claims 15, 16, 18 –24, and 26 – 30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 15, 16, 18 –24, and 26 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohani et al (Rohani, US Patent No. 6,064,659) in view of Dahlman et al. (Dahlman, US Patent No. 6,173,162) in further view of Chen (Chen, US Patent US 5,893,035).

Regarding claims 15 and 21, Rohani teaches of in a system and method for controlling the transmission power of a base station configured to communicate with a plurality of mobile stations (Figure 5), said base station comprising: a plurality of power command units configured to receive signals intended for said mobile stations and power command signals sent by said mobile stations (Figure 5 and, column 5,lines 41 –45); a plurality of attenuation units configured to attenuate the respective sub-composite signals (Figure 5 and column 6,lines 14 –18); and a summer configured to form a composite signal to be transmitted to said mobile stations from signals transmitted by the plurality of attenuation units (Figure 5, column 5,lines 23 –29 and column 6, lines 14 –18).

Rohani does not specifically teach of a plurality of summation units configured to form respective sub-composite signals from input signals having a given priority level transmitted by the power command units (though teaches of various types of data to be transmitted in column 1, lines 23 –28 and again in column 1, lines 62 –66); or [a plurality of attenuation units configured to attenuate the respective sub-composite signals] transmitted by the summation units by applying respective attenuation coefficients (though it should be noted Rohani does teach of a power limiter to reduce power in column 6,lines 14 –18; note the brackets are for clarity in language and it is believed these limitations have been addressed by the above cited art).

In a related art dealing with the power control of based on quality requirements, Dahlman teaches of a plurality of summation units configured to form respective sub-composite signals from input signals having a given priority level transmitted by the power command units (Figure 1B and starting column 2, line 64 and ending column 3, line 24 and further in column 4, lines 14 –27) and thus further of transmitted by the summation units (Figure 1B).

It would have been obvious to one skilled in the art at the time of invention to have included into Rohani's data power control system, Dahlman's multiplexed data and quality of service provisions, for the purposes controlling power based on the requirement of quality for the data being sent, as taught by Dahlman.

Rohani in view of Dahlman do not specifically teach [a plurality of attenuation units configured to attenuate the respective sub-composite signals transmitted by the summation units] by applying respective attenuation coefficients.

In a related art dealing with power control in a mobile system, Chen teaches of [a plurality of attenuation units configured to attenuate the respective sub-composite signals transmitted by the summation units] by applying respective attenuation coefficients (Figure 6 and column 13, lines 24 –33).

It would have been obvious to one skilled in the art at the time of invention to have included into Rohani in view of Dahlman's power control system, Chen's attenuation factor, for the purposes of varying power control to acceptable levels and thus reducing interference in the cell, as taught by Chen.

Regarding claim 16, Rohani in view of Dahlman and Chen, teach all the claimed limitations as recited in claim 15. Rohani further teaches of wherein the attenuation coefficient

of each of the plurality of attenuation units is a power P of a respective base attenuation coefficient, the value of P being identical for all said attenuation units column 4, lines 42 – 57).

Regarding claims 18 and 26, Rohani in view of Dahlman and Chen, teach all the claimed limitations as recited in claims 15 and 21. Rohani and Dahlman further teach of wherein an input signal intended for a mobile station is assigned to a sub-composite signal at the beginning of the communication (Rohani: column 6,lines 19 – 32 and Dahlman: starting column 2, line 64 and ending column 3, line 24).

Regarding claims 19 and 27, Rohani in view of Dahlman and Chen, teach all the claimed limitations as recited in claims 15 and 21. Dahlman further teaches of wherein an input signal intended for a mobile station is assigned to a sub-composite signal, the input signal being modified only at the time of the arrival of at least one event related to said mobile station (column 5, lines 54 –60).

Regarding claims 20 and 28, Rohani in view of Dahlman and Chen, teach all the claimed limitations as recited in claims 19 and 27. Dahlman and Chen further teach of wherein the at least one event is a change in type of service, reaching of the saturation level, or entry into soft handover of said mobile station (Dahlman: column 5, lines 54 –60 and column 8, lines 54 –64 and Chen: column 2, lines 50 –60).

Regarding claim 22, Rohani in view of Dahlman and Chen, teach all the claimed limitations as recited in claim 21. Rohani further teaches of further comprising attenuating said sub-composite signals by selecting a larger value for said attenuation coefficient for the sub-composite signal formed from the input signals having a high priority level (Figure 2 and column 2, lines 57 –66 and column 3, lines 26 –45).

Regarding claim 23, Rohani in view of Dahlman and Chen, teach all the claimed limitations as recited in claim 22. Rohani teaches of further comprising attenuating said sub-composite signals by selecting the attenuation coefficients having a same power P of respective base attenuation coefficients, the variation of said attenuation coefficients being obtained by variation of said value of the power P (Figure 2 and column 2, lines 57 –66 and column 3, lines 26 –45).

Regarding claim 24, Rohani in view of Dahlman and Chen, teach all the claimed limitations as recited in claim 23. Rohani teaches of further comprising attenuating said sub-composite signals by selecting the value of P so as not to exceed said predetermined power (Figure 2 and column 2, lines 57 –66 and column 3, lines 26 –45).

Regarding claim 29, Rohani in view of Dahlman and Chen, teach all the claimed limitations as recited in claim 15. Rohani further teaches of wherein the value of attenuation coefficient is large for sub-composite signals having a high priority level (Figure 2 and column 2, lines 57 –66 and column 3, lines 26 –45).

Regarding claim 30, Rohani in view of Dahlman and Chen, teach all the claimed limitations as recited in claim 15. Rohani further teaches of wherein the value of attenuation coefficient is small for sub-composite signals having a low priority level (Figure 2 and column 2, lines 57 –66 and column 3, lines 26 –45).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanmay S Lele whose telephone number is (703) 305-3462. The examiner can normally be reached on 9 - 6:30 PM Monday – Thursdays and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on (703) 308-7745. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Tanmay S Lele
Examiner
Art Unit 2684

NAY MAUNG
SUPERVISORY PATENT EXAMINER

tsl
February 21, 2004